



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,977

05/22/2007

Helmut Fuchs

FUCH3004/FJD

8151

23364 7590 11/25/2009
BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314-1176

EXAMINER

KIRSCH, ANDREW THOMAS

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

11/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,977	Applicant(s) FUCHS ET AL.	
	Examiner ANDREW T. KIRSCH	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The amendment filed 8/7/2009 has been entered.

Specification

2. The abstract of the disclosure is objected to because it contains more than the maximum of 150 words, and it also contains "means" and "said" which are terms that are not allowed in the abstract. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claim 15 is objected to for the following informalities: grammar error "pressure transmitting conduits includes an inner orifice..." Correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
6. Claim 11 recites the limitation that the pressure-transmitting conduits are concentric with said valve assembly. However, the definition of concentric as commonly

Art Unit: 3781

used in the art is "having a common center." The pressure transmitting conduits shown in the Figures presented by the applicant do not adequately show "concentric" conduits based on the accepted definition. There is no support for concentric conduits found in the specification. Therefore one of ordinary skill in the art would not have been able to reconstruct the invention based on the disclosure and the claims, as concentric conduits is neither shown nor explained in an adequate manner.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 11 recites the limitation "said valve assembly" in the ninth line. There is insufficient antecedent basis for this limitation in the claims because the formal introduction of the assembly does not occur until the following paragraph.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3781

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

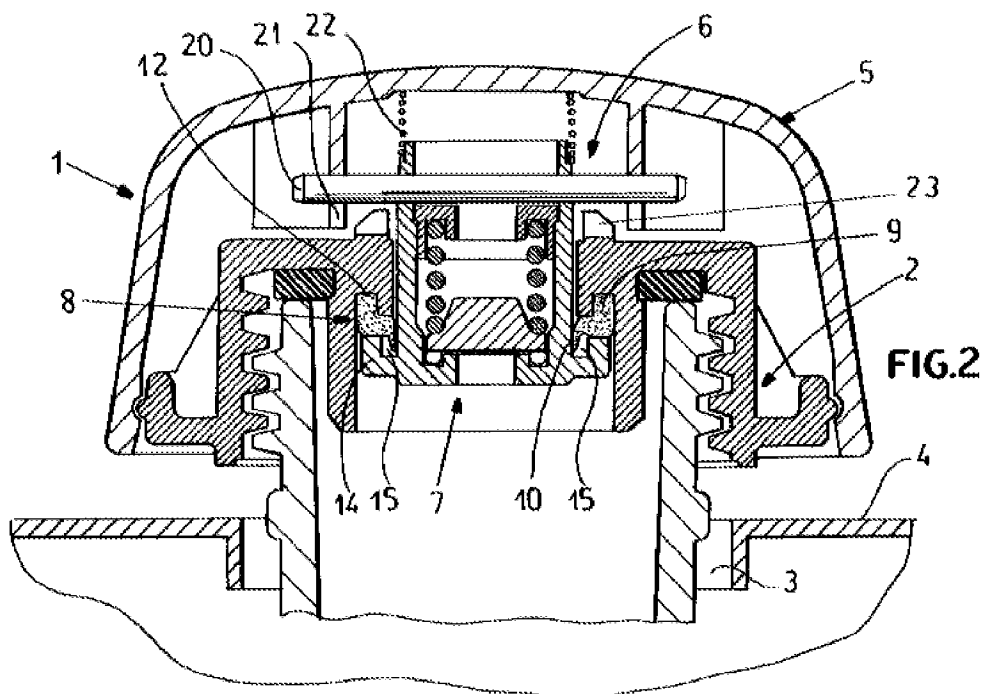
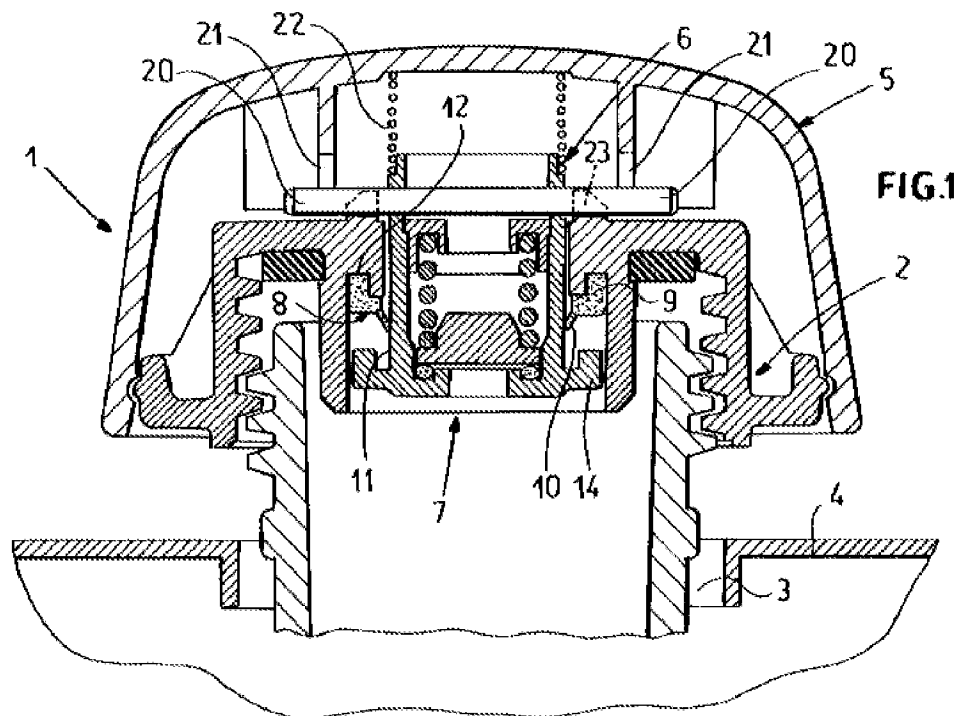
13. Claims 11-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,941,407 (De' Longhi hereinafter) in view of U.S. Patent No. 5,886,266 (Stiller et al. hereinafter).

14. In re claim 11, with reference to Figs. 1 and 2 below, De' Longhi discloses: A closure cap (1) for a fixed neck of a container (4), in particular of a motor vehicle radiator, comprises: an outer cap part (5), having both a closure element for the container neck (2) and a grip element (outer surface of 5), rotatable relative to the container neck (column 2, lines 56-62); a torsion preventer (20); a pressure-controlled

Art Unit: 3781

drive (7) in the form of a diaphragm (see Fig. 2); an inner cap part (11), said inner cap part having a sealing seat (9); a pressure-transmitting arrangement formed by an axial pressure-transmitting conduit (see Fig. 2) in the wall of said inner cap part (11), which wall receives said valve assembly (7); and a valve assembly (7), said valve assembly for uncovering and blocking a fluidic communication between the container interior and the container exterior, wherein: said torsion preventer (20) being located between said grip element (5) and said closure element (2), said torsion preventer being engaged via spring prestressing (spring 22) and disengaged via said pressure-controlled drive (7); said valve assembly has an axially movable overpressure valve body (7), which is pressed toward the container interior against said sealing seat with prestressing in such a way that if a limit value of the container interior pressure is exceeded, it can be lifted from said sealing seat, and an underpressure valve body (2 and 11 with one-way gasket 8) disposed concentrically to a cap axis and correspondingly activatable.

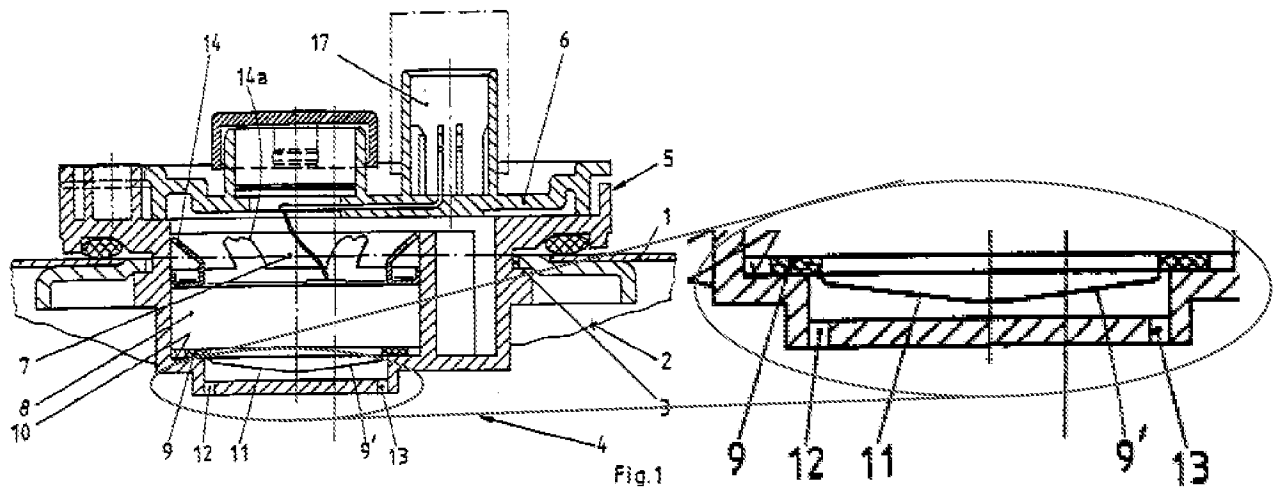
Art Unit: 3781



15. De' Longhi fails to disclose wherein the pressure-transmitting arrangement is formed by multiple axial pressure-transmitting conduits and said axial pressure-

transmitting conduits extend along [and are concentric] with said valve assembly, and discharge at one end opposite to said diaphragm and at the other end, its free end, into the container.

16. However, with reference to Fig. 1 below, Stiller et al. discloses multiple pressure-transmitting conduits (12 and 13) which communicate fluidically with the contents of a container and said axial pressure-transmitting conduits (12 and 13) extend along a valve assembly (vertically), and discharge at one end opposite to a diaphragm ("pressure impact surface 11" column 2, line 4) and at the other end, its free end (bottom surface in inset view below), into a container (1).



17. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized multiple conduits as taught by Stiller et al. instead of the single conduit of De' Longhi for the purposes of providing a guard against damage to the valve from hard contents or to prevent large sediment from entering the valve.

Art Unit: 3781

18. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed (“motor vehicle radiator”) does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

19. In re claim 12, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said pressure-transmitting conduits (12, 13) are distributed uniformly over the circumference of the wall of said inner cap part (see Fig. 1 of Stiller et al. above).

20. In re claim 13, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said one-piece diaphragm (see Fig. 2) on the outer circumference has an annular sealing edge, held in stationary fashion (by spring), and a centrally axially movable diaphragm plate, between which two diaphragm parts an annular bead (see Fig. 2) is provided.

21. In re claim 14, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said sealing edge of said diaphragm is clamped in sealing fashion (by spring, see Fig. 2) between an annular face end of said inner cap (2) part and an annular edge of a diaphragm holder (see Fig. 2).

22. In re claim 15, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein pressure-transmitting conduits (12, 13) include[s] an inner orifice (the lower portion of 12 and 13 is considered to be “inner” because it is the furthest-most portion of the orifice in the container 1) located diametrically opposite said annular bead as combined herein. The term “diametrically

Art Unit: 3781

opposite” is interpreted as having a part thereof on an opposite side of the center axis from one another as defined by the configuration of the claimed structure in Fig. 1 of applicant's disclosure.

23. In re claim 17, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said torsion preventer (20) is formed by a cuplike element, between whose bottom and said diaphragm (see Fig. 2), on the one hand, a pressure disk (see Fig. 2) is disposed, and between whose bottom and said grip element, on the other, a compression spring (22) is disposed. Note that the term “cuplike” is being interpreted as “shaped as to contain an object therein,” and the torsion preventer 20 clearly holds projections 23 therein in Fig. 2 of De' Longhi above.

24. De' Longhi in view of Stiller et al. fails to disclose a torsion preventer whose free edge is provided with coupling ribs, which are distributed over the circumference and point radially outward and which engage radial grooves of said grip element alone or of said grip element and the closure element of the outer cap part, depending on the axial position of the cuplike element.

25. De' Longhi in view of Stiller et al. rather shows the opposite configuration in which the coupling ribs are located on the grip element and the radial grooves are located on the torsion preventer, and engage one another depending on the axial position of the cuplike element.

26. In re claim 18, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said grip element is provided with

Art Unit: 3781

an axially inward-protruding extension, which is engaged on the inside by the cuplike element.

27. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to switch the locations of the coupling ribs and radial grooves of De' Longhi in view of Stiller et al., since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167. Please note that in the instant application, page 3, applicant has not disclosed any criticality for the claimed limitations.

28. In re claim 19, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein the interior of said inner cap part (2), receiving said valve assembly (7), is covered by a fixed retaining plate (see Fig. 2).

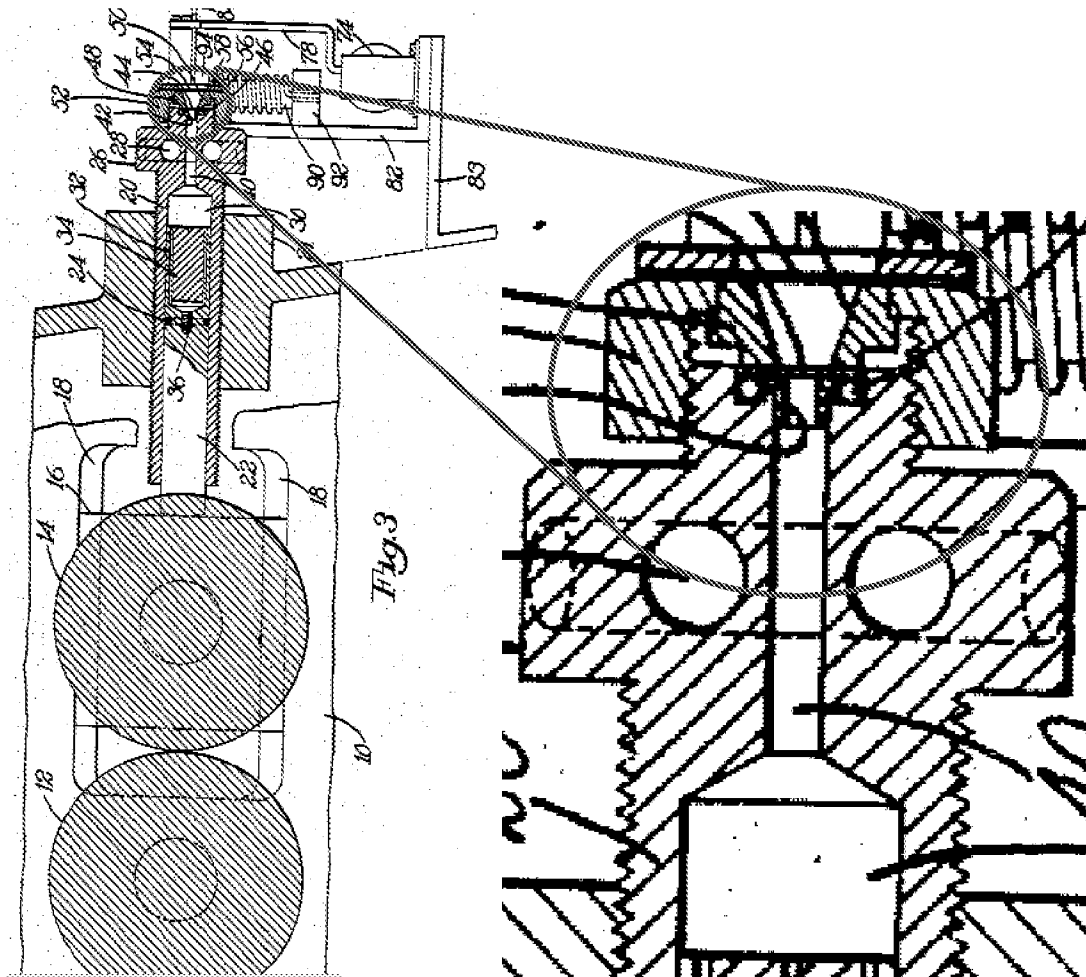
29. In re claim 20, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention including wherein said underpressure valve body (2 and 11, with one-way gasket 8) is integrated axially centrally into said overpressure valve body.

30. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over De' Longhi in view of Stiller et al. as applied to claim 11 above, and further in view of U.S. Patent No. 2,686,930 (Norton hereinafter).

31. In re claim 16, with reference to the Figs. above, De' Longhi in view of Stiller et al. discloses the claimed invention except wherein said pressure-transmitting conduits are shaped conically, such that the smaller-diameter end forms said inner orifice toward the container interior.

Art Unit: 3781

32. However, with reference to Fig. 3 below, Norton discloses a hydraulic safety device wherein a valve body includes a conically shaped conduit (50) oriented with the smaller diameter (inner orifice) towards the container interior (chamber 30).



33. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the shape of the conduits of De' Longhi in view of Stiller et al. to be conical as taught by Norton for the purposes of tailoring the pressure at specific point in the case of liquid or air flow through the conduit as is common in the art.

Response to Amendment

34. The amendment filed 8/7/2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the pressure-transmitting conduits being concentric as in currently amended claim 11.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

35. Applicant's arguments filed 8/7/2009 have been fully considered but they are not persuasive.

36. Applicant's amendments with regards to the concentricity of the conduits are considered new matter as described above.

37. Applicant argues that De'Longhi does not disclose an underpressure valve body which makes the closure cap axially longer than what is shown in De'Longhi. It is not clear what is meant by this statement, however, as best understood, vertical displacement does occur internally with respect to the valve body diaphragm, and therefore, in cross section, the valve assembly does become axially longer when pressure is reduced.

38. Applicant also argues that Stiller et al. does not disclose an underpressure valve body. However, Stiller et al. does disclose a valve body which is under pressure (the

Art Unit: 3781

interior pressure of which is designed for a fuel tank, which is commonly under vacuum pressure, and can therefore also be considered an “underpressure” container).

Conclusion

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW T. KIRSCH whose telephone number is (571)270-5723. The examiner can normally be reached on M-F, 8am-5pm, off alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3781

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T. Kirsch/

Examiner, Art Unit 3781

/Anthony Stashick/
Supervisory Patent Examiner, Art
Unit 3781